

LETTERS TO THE EDITOR.

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The Finger-print System in the Far East.

IN Henri Cordier's new edition of Sir Henry Yule's "Cathay and the Way Thither" (1914) I came across the following note by the editor (p. 123, vol. iii.) :—

"With regard to the finger-print system in the Far East we shall make the following remarks: In NATURE of October 28, 1880 (p. 605), Mr. Henry Faulds, writing from Tokyo, drew the attention to the use made by Japanese of finger-prints, and came to the conclusion 'that the Chinese criminals from early times have been made to give the impressions of their fingers, just as we make ours yield their photographs.' In the same periodical (November 22, 1894, p. 77) Sir W. J. Herschel claimed to have been the first to exhibit the system of finger-prints on board the P. & O. s.s. *Mongolian* in February, 1877. This system he had found in 1858 and communicated to Mr. Galton, who made use of it in his 'Finger-Prints' (1892); hence the discovery of the system was ascribed to Sir W. Herschel in a Parliamentary Blue Book. Sir W. Herschel added in his letter that, to the best of his knowledge, the assertion that the use of finger-marks in this way was originally invented by the Chinese was wholly unproved. Sir W. Herschel was entirely wrong; Mr. Faulds (*ibid.*, October 4, 1894, p. 548) protested against the claim of Sir W. Herschel, and finally a Japanese gentleman, Kumagusu Minakata (*ibid.*, December 27, 1894, p. 199), proved the case for the Japanese and the Chinese. None of these writers quoted the passage of Rashid-ud-din, which is a peremptory proof of the antiquity of the use of finger-prints by the Chinese."

The passage referred to in Rashid-ud-din is quoted by Yule on the same page in the following words :—

"It is usual in Cathay, when any contract is entered into, for the outline of the fingers of the parties to be traced upon the document. For experience shows that no two individuals have fingers precisely alike. The hand of the contracting party is set upon the back of the paper containing the deed, and lines are then traced round his fingers up to the knuckles, in order that if ever one of them should deny his obligation this tracing may be compared with his fingers, and he may thus be convicted." (Sir H. Yule's translation from the French translation of the Arabic text by Klaproth, in *Journ. As.* for 1833 (?), pp. 335-58 and 447-70.)

It seems to me that the description of the process by Rashid-ud-din, so accurate and explicit, can in no way apply to the method of identification by finger-prints. There is no indication of a preliminary blackening of the hand, or of an impress left on the paper. It is definitely said that the process consists in the drawing of an *outline* of the extremities of the fingers "up to the knuckles" while the hand is set on the sheet of paper.

Either Rashid-ud-din has entirely misunderstood the description given to him by Pūlad Chingsang, the envoy of the Grand Khan to Tabritz, from whom he appears to have gathered most of his information regarding the Mogul Empire (*ibid.*, p. 111), or we have here the description of a process of identification hitherto unknown.

Anybody who will take the trouble to trace the outline of the outstretched fingers of the hands of

different individuals will easily gather how different are the figures obtained in regard to the absolute and relative lengths of the fingers, to their relative distance from one another, to the angle made by the axis of the thumb with the axis of the index, and so on.

Whether these differences correspond with a distinctly characteristic drawing for each individual person, so as to make the process a real method of personal identification, I am not prepared to say, but the matter might be worthy of further investigation.

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Rome (23), Via Urbana 167, April 3.

Supposed Effect of Sunlight on Water-drops.

Is it not the fact that sunshine causes a kind of "greasiness" which makes drops of water roll up when in contact with glass instead of spreading uniformly over the surface? I have frequently been troubled with this action when endeavouring to mount diatoms, and it is only recently that I have observed that it comes on as soon as the sun begins to shine, and that when the operation is performed in dull weather the difficulty does not arise. In clearing the diatoms from flocculent matter my practice is to rock the material from side to side in a shallow dish, dragging the diatoms into lines and rolling the dust and dirt off into lumps that can be sucked up with a syringe, but this process fails in sunshine owing to the diatoms floating. The evolution of a thin film of gas or vapour on the surface of the glass is a suggested explanation.

G. H. BRYAN.

A SOUTH AFRICAN PIONEER.¹

THE subject of this biographical volume—the great hunter and pioneer of South Central Africa—has left behind him a name which, as one of his friends—a South African administrator—has said of him, "stands for all that is straightest and best in South African story." The writer of this notice can only think of one close parallel to him, the very similarly compacted James Chapman, of mixed English, Dutch, and French parentage, who preceded Selous, rivalled him as hunter, and resembled him in sweetness of character, transparent honesty, and love of Nature-study. Chapman, however, has been far more unlucky than Selous, not only in lack of Government appreciation of his merits and qualities, but also in never having had a biographer. Selous is at least made known, to those who have the leisure and inclination to read, by this work of Mr. J. G. Millais—mentally a twin brother—who has enriched his "Life of Selous" by some very beautiful drawings, the more beautiful in that they are so wonderfully true to actuality.

The book opens with an account of Selous's ancestry and relations, contributed by a brother and a sister. The genealogy, trailing off to Scottish kings and Midland worthies, mentions the French-Huguenot and Jersey origin and associations of the main stock, but says nothing on a point that certainly interests myself. I remember first meeting F. C. Selous in 1881 at the house in Harley Street of Sir Alfred Garrod, the great gout

¹ "Life of Frederick Courtenay Selous, D.S.O., Capt. 25th Royal Fusiliers." By J. G. Millais. Pp. xiv + 387. (London: Longmans, Green, and Co., 1918.) Price 21s. net.